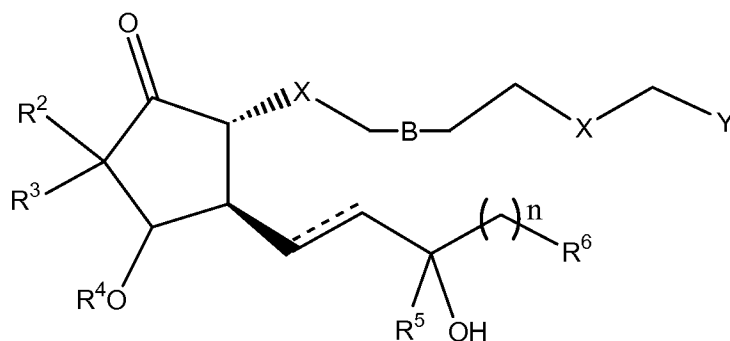


**Amendments To The Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

5 **Listing of Claims:**

1. (Cancelled)
2. (Cancelled)
3. (Original) A compound represented by Formula I:



10 **Formula I**

wherein the dashed lines indicate the presence or absence of a bond, the hatched wedges indicate the  $\alpha$  (down) configuration, and the solid triangles indicate the  $\beta$  (up)

15 configuration;

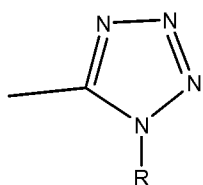
B is a single, double, or triple covalent bond;

n is 0-6;

X is CH<sub>2</sub>, S or O;

Y is any pharmaceutically acceptable salt of CO<sub>2</sub>H, or CO<sub>2</sub>R, CONR<sub>2</sub>,

20 CONHCH<sub>2</sub>CH<sub>2</sub>OH, CON(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>, CH<sub>2</sub>OR, P(O)(OR)<sub>2</sub>, CONRSO<sub>2</sub>R, SONR<sub>2</sub>, or



R is H, C<sub>1-6</sub> alkyl or C<sub>2-6</sub> alkenyl;

R<sup>2</sup> and R<sup>3</sup> are C<sub>1-6</sub> linear alkyl which may be the same or different, and may be bonded to each other such that they form a ring incorporating the carbon to which they are commonly attached;

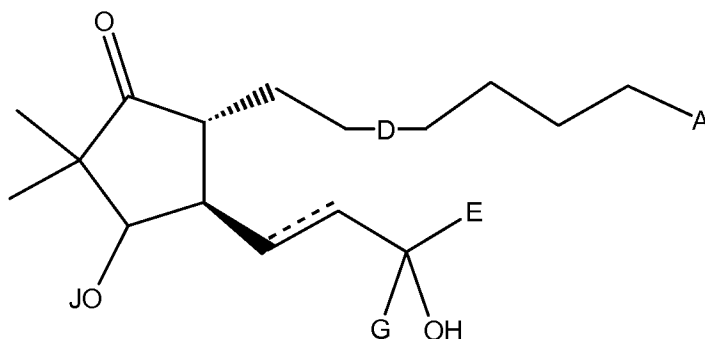
- 5 R<sup>4</sup> is hydrogen, R, C(=O)R, or any group that is easily removed under physiological conditions such that R<sup>4</sup> is effectively hydrogen;

R<sup>5</sup> is hydrogen or R;

R<sup>6</sup> is

- 10 i) hydrogen;
- ii) a linear or branched hydrocarbon containing between 1 and 8 carbon atoms, which may contain one or more double or triple bonds, or oxygen or halogen derivatives of said hydrocarbon, wherein 1-3 carbon or hydrogen atoms may be substituted by O or a halogen; or
- 15 iii) aryloxy, heteroaryloxy, C<sub>3-8</sub> cycloalkyloxy, C<sub>3-8</sub> cycloalkyl, C<sub>6-10</sub> aryl or C<sub>3-10</sub> heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C<sub>6-10</sub> aryl, C<sub>3-10</sub> heteroaryl, aryloxy, heteroaryloxy, C<sub>1-6</sub> alkyl, OR, SR, and SO<sub>2</sub>R; and

the compound of Formula I is not a compound of Formula II



**Formula II**

wherein A is CO<sub>2</sub>H, CO<sub>2</sub>Me, or CO<sub>2</sub>Et;

D is a single, double, or triple covalent bond;

E is a linear, branched, or cycloalkyl chain of 3 to 7 carbons, trifluoromethylbutyl, hydroxylalkyl, or  $\text{CH}_2\text{R}^7$  wherein  $\text{R}^7$  is phenyl, cyclopentyl, phenoxy, chlorophenoxy, propoxy, or  $-\text{CH}_2\text{SCH}_2\text{CH}_3$ ;

J is hydrogen, R,  $\text{C}(=\text{O})\text{R}$ , or any group that is easily removed under physiological

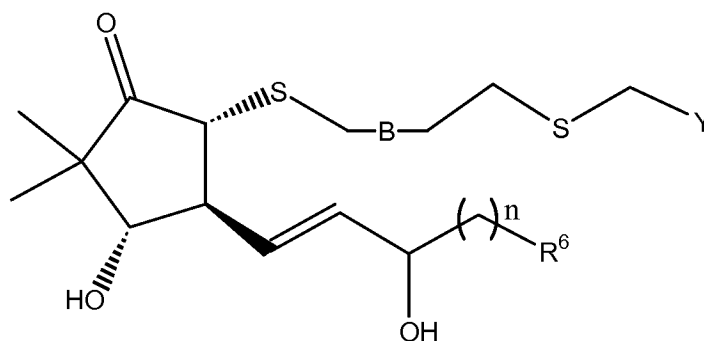
5 conditions such that  $\text{R}^4$  is effectively hydrogen; and

G is H or  $\text{CH}_3$ .

4. (Previously Amended) The compound of claim 3 wherein A is  $\text{CO}_2\text{R}^8$ , wherein  $\text{R}^8$  is any linear, branched, or cyclic alkyl group having from 3 to 6 carbons.

5. (Previously Amended) The compound of claim 3 which is further represented by

10 Formula III



**Formula III**

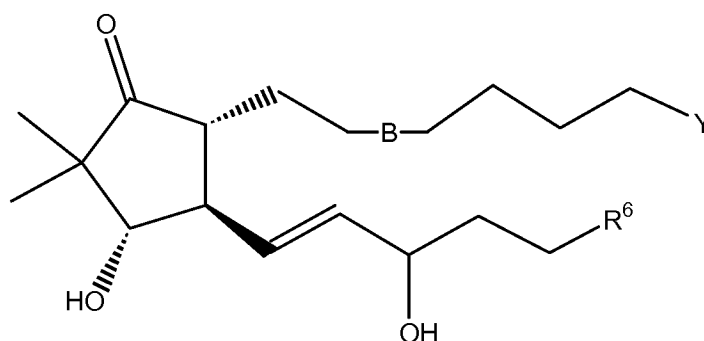
wherein Y is  $\text{CO}_2\text{R}$ , or any pharmaceutically acceptable salt of  $\text{CO}_2\text{H}$ .

6. (Previously Amended) The compound of claim 5 wherein  $\text{R}^6$  is  $\text{C}_{6-10}$  aryl or  $\text{C}_{3-10}$  heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy,  $\text{C}_{1-6}$  alkyl, OR, SR, and  $\text{SO}_2\text{R}$ .

7. (Previously Amended) The compound of claim 6 wherein  $\text{R}^6$  is naphthyl, benzofuranyl, or benzothienyl, which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy,  $\text{C}_{1-6}$  alkyl, OR, SR, and  $\text{SO}_2\text{R}$ .

8. (Previously Amended) The compound of claim 7 wherein Y is  $\text{CO}_2\text{H}$  or  $\text{CO}_2\text{Me}$ .

9. (Previously Amended) The compound of claim 8 where  $R^6$  is 3-chlorobenzothien-2-yl.
10. (Previously Amended) The compound of claim 9 where n is 2.
11. (Previously Amended) The compound of claim 10 where B is a single bond.
- 5 12. (Previously Amended) The compound of claim 3 which is further represented by Formula IV



**Formula IV**

wherein Y is  $CO_2R$  or any pharmaceutically acceptable salt of  $CO_2H$ ; and

- 10  $R^6$  is  $C_{6-10}$  aryl or  $C_{3-10}$  heteroaryl, wherein one or more carbons is substituted with N, O, or S; and which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy,  $C_{1-6}$  alkyl, OR, SR, and  $SO_2R$ .
13. (Previously Amended) The compound of claim 12 wherein Y is  $CO_2H$  or  $CO_2Me$ .
14. (Previously Amended) The compound of claim 13 wherein  $R^6$  is phenyl.
- 15 15. (Previously Amended) The compound of claim 14 wherein B is a double bond.
16. (Previously Amended) The compound of claim 13 wherein  $R^6$  is naphthyl, benzofuranyl, or benzothienyl, which may contain one or more substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy,  $C_{1-6}$  alkyl, OR, SR, and  $SO_2R$ .
- 20 17. (Previously Amended) The compound of claim 16 wherein  $R^6$  is 3-chlorobenzothien-2-yl.
18. (Previously Amended) The compound of claim 17 wherein B is a double or triple bond.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Previously Amended) The compound of claim 3 wherein said compound is

5 selected from the group consisting of

(3-{(1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl}-propylsulfanyl)-acetic acid methyl ester (**21**, **22**);

10 (3-{(1*R*,4*S*,5*S*)-5-(3-chloro-benzo[*b*]thiophen-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentylsulfanyl}-propylsulfanyl)-acetic acid (**23**, **24**);

(*Z*)-7-{(1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl}-hept-5-ynoic acid methyl ester (**34**, **35**);

(*Z*)-7-{(1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl}-hept-5-ynoic acid (**36**,**37**);

15 (*Z*)-7-{(1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl}-hept-5-enoic acid methyl ester (**38**,**39**);

(*Z*)-7-{(1*R*,4*S*,5*R*)-5-[(*E*)-5-(3-chloro-benzo[*b*]thiophene-2-yl)-3-hydroxy-pent-1-enyl]-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl}-hept-5-enoic acid (**40**,**41**);

20 (*Z*)-7-[(1*R*,4*S*,5*R*)-4-Hydroxy-5-((*E*)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**50**,**51**)

(*Z*)-7-[(1*R*,4*S*,5*R*)-4-Hydroxy-5-((*E*)-3-hydroxy-5-phenyl-pent-1-enyl)-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**52**,**53**)

(*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**54**,**55**)

25 7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-heptanoic acid (**56**,**57**)

(*Z*)-7-[(1*R*,4*S*,5*R*)-5-(4-Benzo[*b*]thiophen-2-yl-3-hydroxy-butyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (**58**,**59**)

30 (*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid ethylamide (**60**,**61**)

(*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid diethylamide (**62,63**)

(*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid (2-hydroxy-ethyl)-amide (**64,65**)

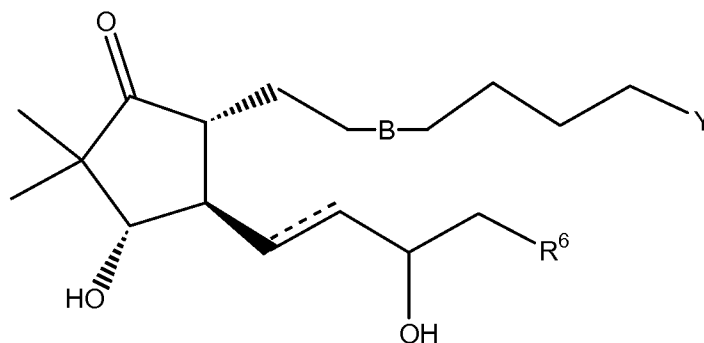
5 (3*S*,4*R*,5*R*)-4-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-3-hydroxy-2,2-dimethyl-5-[(*Z*)-6-(1-*H*-tetrazol-5-yl)-hex-2-enyl]-cyclopentanone (**66,67**) (*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid amide (**68,69**)

10 (*Z*)-7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-enoic acid methyl ester (**70,71**)

7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid methyl ester (**72,73**)

7-[(1*R*,4*S*,5*R*)-5-((*E*)-4-Benzo[*b*]thiophen-2-yl-3-hydroxy-but-1-enyl)-4-hydroxy-3,3-dimethyl-2-oxo-cyclopentyl]-hept-5-ynoic acid (**74,75**).

15 23. (Previously Amended) The compound of claim 3 which is further represented by Formula XIII



**Formula XIII**

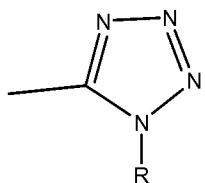
wherein B represents a single or double bond;

and R<sup>6</sup> is naphthyl, benzofuranyl, or benzothienyl, which may contain one or more

20 substituents selected from the group consisting of halogen, trihalomethyl, cyano, nitro, amino, hydroxy, C<sub>1-6</sub> alkyl, OR, SR, and SO<sub>2</sub>R.

24. (Previously Amended) The compound of claim 23 wherein R<sup>6</sup> is benzothien-2-yl.

25. (Previously Amended) The compound of claim 24 wherein Y is any pharmaceutically acceptable salt of  $\text{CO}_2\text{H}$ , or  $\text{CO}_2\text{R}$ ,  $\text{CONR}_2$ ,  $\text{CONHCH}_2\text{CH}_2\text{OH}$ ,  $\text{CON}(\text{CH}_2\text{CH}_2\text{OH})_2$ , or

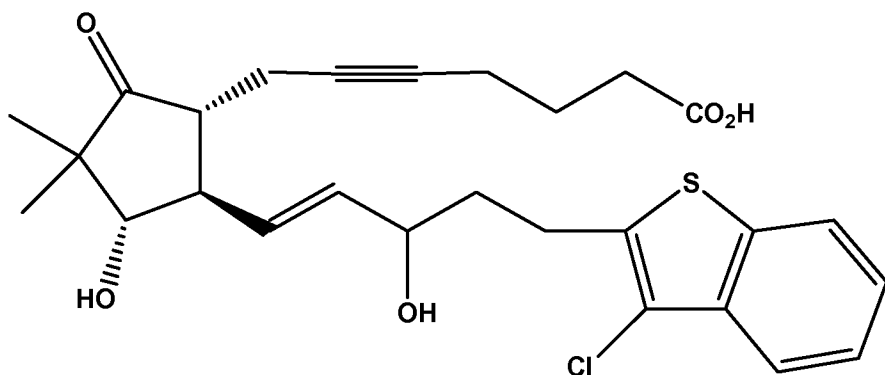


26. (Previously Amended) The compound of claim 25 wherein the dashed line indicates the presence of a bond and B is a double bond.

27. (Previously Amended) The compound of claim 25 wherein the dashed line indicates the presence of a bond and B is a single bond.

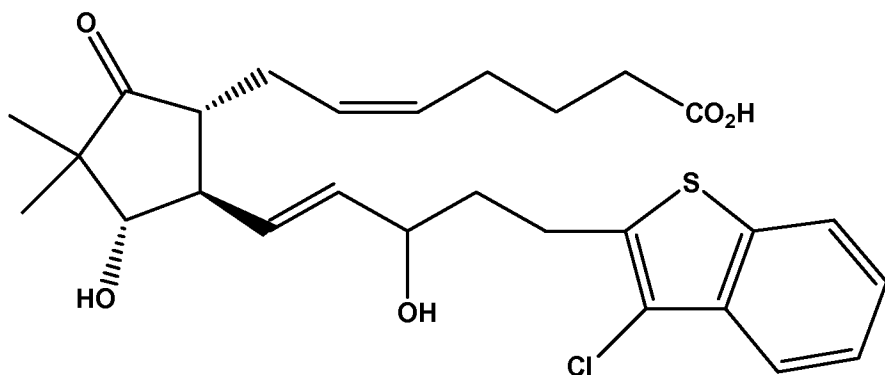
28. (Cancelled)

29. (Previously Presented) The compound of claim 23 comprising



or a pharmaceutically acceptable salt or a prodrug thereof.

30. (Previously Presented) The compound of claim 23 comprising



or a pharmaceutically acceptable salt or a prodrug thereof.